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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/487,522      | 01/19/2000  | Bahram G. Kermani    | KERMANI-43          | 3260             |

7590 12/14/2005

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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2176

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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*Technology Center 2100*

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/487,522  
Filing Date: January 19, 2000  
Appellant(s): KERMANI, BAHRAM G.

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Joseph Powers  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 09/27/05 appealing from the Office action mailed 05/12/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

|           |              |         |
|-----------|--------------|---------|
| 6,289,304 | GREFENSTETTE | 11-2001 |
| 6,789,230 | KATARIYA     | 09-2004 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-9, 11-16, 18, 19, 22-23, 25-26, 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette, US Patent 6,289,304 B1, 11/11/01 (filed 3/17/99) in view of Katariya et al., US 6,789,230 B2.

In reference to claim 1, Grefenstette teaches a text summarization using part-of-speech data. Grefenstette teaches the following:

-Receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Compare to ***"prompting a user to select an abstracted version of the electronic document to be created from a plurality of abstracted versions available to be created;"***

-Using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of speech for tokens in the text of each of the tokenized sentences. Using the part-of-speech data for each tokenized sentence to obtain group data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. Using the group data for each sentence to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the removal criterion are removed. Presenting the summarized version of the text. See

columns 2-3 and column 12, lines 9-32. Compare to ***“responsive to the selection by the user of the abstracted version to be created, creating the selected abstracted version of the electronic document by executing a set of instructions corresponding to the electronic document, wherein the instructions, are, before said abstracted version is selected by the user, customized to the electronic document, . . .; and outputting the abstracted version of the electronic document in a predetermined format”***.

Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. Compare to ***“the customization comprising a plurality of weights pre-assigned to respective portions of the electronic document to enable***

***creation of said plurality of abstracted versions***". See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

In reference to claim 3, Grefenstette teaches that executing the "removal criteria" creates a summarized version of the text. See column 2, lines 15-64.

In reference to claim 4, Grefenstette teaches that the user's selection of removal criteria is specific to each document or text group. See column 2.

In reference to claims 5-8, Grefenstette teaches that the set of instructions or removal criteria can be specified to remove various parts-of-speech such as verbs, articles, adverbs, and adjectives. See column 2, lines 32-44 and column 5, lines 29-49.

Claims 9 and 11-15 are rejected under the same rationale used above in claims 1 and 4-8 respectively.

Claims 16, 18, 19, and 22 are rejected under the same rationale used above in claims 1, 4-5, and 8 respectively.

Claim 23 is rejected under the same rationale as claim 1 above.

In reference to claim 25, Grefenstette teaches that the user's selection of removal criteria is specific to each document or text group. See column 2.

In reference to claims 26 and 28, Grefenstette teaches that the set of instructions or removal criteria can be specified to remove various parts-of-speech such as verbs, articles, adverbs, and adjectives. See column 2, lines 32-44 and column 5, lines 29-49.

In reference to claims 30-32, Grefenstette's system teaches that executing a set of instructions or "removal criteria" will generate an abstracted version of a document. See column 2, lines 15-31.

Claims 37-38 are rejected under the same rationale used in claim 1 above.

In reference to claims 39 and 41, Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of

Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

In reference to claims 40 and 42, Grefenstette discloses receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Grefenstette discloses using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of speech for tokens in the text of each of the tokenized sentences. Using the part-of-speech data for each tokenized sentence to obtain group data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. Using the group data for each sentence to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the removal criterion are removed. Presenting the summarized version of the text. See columns 2-3 and column 12, lines 9-32. Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Grefenstette's system executes instructions regarding parts-of-speech



removal criteria, which when applied is “customized” to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya’s instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette’s summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

#### **(10) Response to Argument**

With respect to claims 1, 9, 16, 23, and 3-8, 11-15, 18-19, 22, 25-26, 28-32, and 40-42, Appellant argues the prior art references, Grefenstette and Katariya do not teach “the instructions are customized to the electronic document before said abstracted version is selected by the user”. Appellant argues Katariya’s instructions are not customized to the electronic document. Examiner disagrees. Grefenstette teaches that a user input device selects one of a set of POS based removal criteria and a summary is generated according to that input. Examiner has utilized Katariya, US 6,789,230 to illustrate a system in which instructions for generating a summary are specific to the

document. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. Selecting sentences based on their weights and generating a summary from those calculations entails “customizing” before the abstracted version is selected by a user. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya’s instructions that are specific to the electronic document in the system of Grefenstette since it extends Grefenstette’s summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user. Katariya’s summary generating system executes a set of instructions which are customized to the document before being executed. See column 4, lines 21-67 in which Katariya teaches, **“the summary generating system generates the summary based on the weights of the sentences of the document”**. The weights indicate the importance of the sentence to the document which are later used by the sentence summary generator. Selecting sentences based on their weights and generating a summary from those calculations entails “customizing” before the abstracted version is selected by a user.

Appellant argues Katariya teaches creation of only one summary version of the document and not a plurality of abstracted versions of the electronic document. Appellant concedes Grefenstette teaches selection between creation of multiple

versions of an electronic document; however, argues Grefenstette does not teach abstraction based on pre-assigned weights. Appellant asserts the combination of Katariya and Grefenstette does not teach certain limitations but does not provide reasons why the combination is not appropriate. Statements that the combination doesn't allow for *(1) the selection between multiple versions to be created and (2) a version specifically selected by the user can be created using a customized set of instructions comprising pre-assigned weights to portions of the electronic document* are unsupported. Appellant argues Grefenstette cannot fill the void of (1) as he does not teach abstraction based on pre-assigned weights; however, this is a feature taught by Katariya as indicated in the rejections above. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

With respect to claims 37-39 and 41, Appellant argues Katariya does not teach a methodology where subsets of weights assigned to an electronic document are associated with different versions of electronic document that can be created. Examiner respectfully disagrees in view of the comments above. Appellant concedes Grefenstette teaches selection between creation of multiple versions of an electronic

document and Katariya teaches a summary algorithm executed after sentences are assigned weights for creating a single summary version. However, argues Grefenstette does not teach abstraction based on pre-assigned weights. Appellant asserts the combination of Katariya and Grefenstette does not teach certain limitations but does not provide reasons why the combination is not appropriate. The claim limitations are taught by the references as indicated in the rejections above. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

In reference to claims 40 and 42, Appellant argues the recited claim limitations are not taught by the references. Examiner respectfully disagrees. Grefenstette discloses receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Compare to ***“user selects a set of instructions for abstracting. . .from a plurality of sets of instructions for abstracting the electronic document. . .”*** Grefenstette discloses using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of speech for tokens in the text of each of the tokenized sentences. Using the

part-of-speech data for each tokenized sentence to obtain group data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. Using the group data for each sentence to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the removal criterion are removed. Presenting the summarized version of the text. See columns 2-3 and column 12, lines 9-32. Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in

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the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Rachna Singh


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